

### STATEMENT OF BASIS

as required by LAC 33:IX.3109 for a draft permit for which a fact sheet under LAC 33:IX.3111 is not prepared, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0032344; AI 38059; PER20070001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I.           **THE APPLICANT IS:** Town of Boyce  
Boyce Wastewater Treatment Facility  
Post Office Box 146  
Boyce, LA 71409-0146
  
- II.           **PREPARED BY:** Todd Franklin
  
- DATE PREPARED:** October 29, 2007
  
- III.          **PERMIT ACTION:** reissue LPDES permit LA0032344, AI 38059; PER20070001  
  
LPDES application received: October 11, 2007  
  
EPA has not retained enforcement authority.  
  
Previous LPDES permit effective: May 1, 2002  
Previous LPDES permit expires: April 30, 2007

#### IV.          **FACILITY INFORMATION:**

- A.          The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Boyce.
  
- B.          The permit application does not indicate the receipt of industrial wastewater.
  
- C.          The facility is located ¼ mile northwest of the intersection of LA Hwy. 1 and LA Hwy. 8 in Boyce, Rapides Parish.
  
- D.          The treatment facility consists of a three cell oxidation pond with chlorine disinfection.
  
- E.          Outfall 001

Discharge Location:      Latitude 31° 23' 14" North  
                                  Longitude 92° 39' 41" West

Description:              treated sanitary wastewater

Design Capacity:         0.45 MGD

Type of Flow Measurement which the facility is currently using: Continuous Recorder

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**V. RECEIVING WATERS:**

The discharge is into the Red River in segment 100101 of the Red River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 100101 of the Red River Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Full	Full	Not Supported	N/A	Not Supported	N/A	Full

<sup>1/</sup>The designated uses and degree of support for Segment 100101 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 100101 of the Red River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007, from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

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Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin  
 Permits Division  
 Department of Environmental Quality  
 Office of Environmental Services  
 P. O. Box 4313  
 Baton Rouge, Louisiana 70821-4313

## IX.

**PROPOSED PERMIT LIMITS:**

Subsegment 100101, Red River-Arkansas State Line to Alexandria, is listed on LDEQ's Final 2004 303(d) List as impaired for sulfates and color. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Red River Basin, those suspected causes for impairment which are not directly attributed to the sanitary wastewater point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

**Sulfates and Color**

According to the 2004 305(b) Report, the sulfates impairment is attributed to sources outside state jurisdiction or borders and natural sources and the color impairment is attributed to upstream sources. Because the discharge consists of treated sanitary wastewater, which is not listed as a cause for the sulfates or color impairment, no requirements for these parameters shall be placed into the permit.

**Final Effluent Limits:****OUTFALL 001**

Final limits shall become effective on the effective date of the permit, and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD <sub>5</sub>	113	30 mg/l	45 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELTP) for facilities of this treatment type and size discharging into the Red River.
TSS	338	90 mg/l	135 mg/l	

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**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X.****PREVIOUS PERMITS:**

LPDES Permit No. LA0032344: Effective: May 1, 2002

Expired: April 30, 2007

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report (MGD)	Report (MGD)	Continuous	Recorder
BOD <sub>5</sub>	113 lbs/day / 30 mg/l	45 mg/l	2/month	Grab
TSS	338 lbs/day / 90 mg/l	135 mg/l	2/month	Grab
Fecal Coliform				
Colonies/100 ml	200	400	2/month	Grab
pH	Within the Range of 6.0 su – 9.0 su		2/month	Grab

**XI.****ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates the following most recent inspection performed for this facility.

Date – September 27, 2006

Inspector – LDEQ

Findings and/or Violations -

1. Facility consists of a three cell oxidation pond with a chlorine contact chamber.
2. DMR review revealed no permit excursions for the months January 2006 to July 2006.
3. At the time of the inspection, flow was being estimated using a yardstick in the V-notch weir.

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4. Chlorine line had been disconnected from chlorine cylinder.
5. Algae bloom caused effluent to be green in color with visible suspended solids.
6. Facility site review showed grasses and vines growing around perimeter of wet well and chlorine contact chamber. Tall grass growing on levees of the oxidation ponds.
7. Unauthorized dump was located behind the chlorine contact chamber with tree limbs and other solid waste.
8. Flow recorder was not operating and replacement parts had been ordered.
9. During the month of July, 2006, only one sample was collected instead of two per month as required by the permit. Also, during the month of July, flow was not reported on the DMR. Loading requirements could not be calculated or reported on the DMR.
10. Operators Daily Logs were missing for the months of March, June, and July for the year 2006.
11. Mr. Aaron advised there had been a staff reduction causing a shortage of operators at the plant.

**B) Compliance and/or Administrative Orders**

A review of the files indicates that no recent enforcement actions have been administered against this facility.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning August 2005 through July 2007 has revealed the following violations:

**July, August 2006** -- only one sample was taken. Flow was not reported. Loading Limits were not reported.

**September, October, November, and December 2006, January 2007** -- only one sample was taken. Flow was not reported.

**XII.****ADDITIONAL INFORMATION:**

Please be aware that the Department will be conducting a TMDL in the Red River Basin scheduled for completion in 2007. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

The nearest drinking water intake, Bossier City Waterworks, is located upstream from the discharge point; therefore, there shall be no additional monitoring requirements placed into the permit.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.45 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD}_5: 8.34 \text{ lb/gal} \times 0.45 \text{ MGD} \times 30 \text{ mg/l} = 113 \text{ lbs/day}$$

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At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
BOD <sub>5</sub>	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report each year for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

<b>Audit Period Begins</b>	<b>Audit Period Ends</b>	<b>Audit Report Completion Date</b>
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

**XIII****TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV****REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

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Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Boyce, Boyce Wastewater Treatment Facility, October 11, 2007.